

NOW 10 CENTS

AVIATION

J.O.S.

JULY 24, 1922

Issued Weekly

PRICE 10 CENTS

RECEIVED
JUN 24 1922
FIELD OFFICERS SCHOOL
LANGLEY FIELD, VA.

Air Power

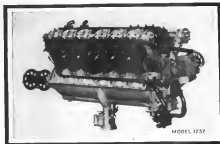
VOLUME XIII
Number 4

SPECIAL FEATURES

MEETING OF AERONAUTICAL CHAMBER OF COMMERCE
CLEVELAND-DETROIT AIRWAY INAUGURATED
AIRCRAFT FOR R. R. EMERGENCY
NAVY TESTS OF TORPEDO PLANES

THE GARDNER, MOFFAT CO., INC.
HIGHLAND, N. Y.
225 FOURTH AVENUE, NEW YORK

Four
Dollars
a Year



MODEL 1237

Freedom From Vibration

A Packard Aircraft Engine in flight is as smooth and flexible as a Twin-Six on the roadway below. Its perfectly balanced design provides an even flow of power, closely approaching that of a turbine.

PACKARD MOTOR CAR COMPANY, DETROIT, U. S. A.



PACKARD

Ask the man who flies one

Widely Known and Famous

Aeromarine
EST. 1914

There has been firmly established throughout the country an active and intense allegiance to the AEROMARINE name and the excellence of AEROMARINE FLYING BOATS.

Underlying it and stimulating it is the wonderful record of their performance; the charm of their travel; the ease with which they handle; and lastly, the superb reliability and economy with which they serve.

We offer to discriminating buyers a limited number of the famous AEROMARINE NAVY U.S. LIBERTY ENGINED FLYING BOATS at prices as low as quality, performance and prestige will allow - Write for illustrated, descriptive pamphlet and booklet "What They Say about the Aeromarine Flying Boat Service."

Aeromarine Engineering and Sales Co.

1800 Times Building, New York

And see us, the Great Lakes between Cleveland and Detroit the "Great Lakes" Flying Boats of the Aeromarine Airways are meeting daily, adding more prestige to the Aeromarine name and helping Aeromarine Boats stand in Aerial Transportation.



*Sampling on rollers for the airplane
tires of any size and every type*

Copyright 1922 by The Goodyear Tire & Rubber Co., U.S.A.

Recognizing that aviation's advancement requires the co-operation of allied industries, Goodyear devotes the entire effort of a large department to the design and production of rubber equipment for aircraft.

The successful work of this organization has won a deep regard for Goodyear and Goodyear Aviation Equipment among designers and pilots everywhere. Goodyear Airplane Tires are upon the largest and most improved ships of today. And de-

signers who are considering 'planes of even greater dimensions, know that Goodyear will have suitable equipment in readiness.

Goodyear's complete understanding of aviation's needs comes from an experience as old as the airplane and the knowledge of how to make rubber compounds that will serve best under any condition.

In lighter-than-air work, Goodyear's position is well known to every aeronaut.

Goodyear Means Good Wear

GOODYEAR

Congratulations!

to the
UNITED STATES AIR MAIL SERVICE

Operating daily except Sunday in each direction between New York and San Francisco.

Flying twenty-one planes every day, except Sunday, Summer and Winter.

Operating over all kinds of territory and under all weather conditions.

And in one year - it has - -

Flown a total of one million seven hundred and fifty thousand miles!
Carried more than forty-nine million letters!

Actually completing more than 92.5% of all trips!

Without a single fatality!

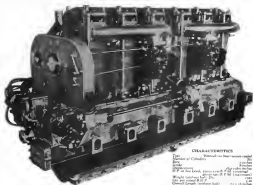
The United States Air Mail Service has proved the practicability of Air Transport. It has operated under normal conditions, over some of the most difficult flying country, in all kinds of weather.

**CONGRATULATIONS TO THE
UNITED STATES AIR MAIL SERVICE**

Curtiss

**CURTISS AEROPLANE
AND MOTOR CORPORATION**
Garden City, Long Island, New York





CHARACTERISTICS

Type	Vertical in-line water-cooled
Number of Cylinders	Two
Bore	2 1/2 inches
Stroke	4 inches
Weight (empty)	1,000 lbs.
Weight (complete)	1,200 lbs.
Power (at 1,800 r.p.m.)	150 h.p.
Power (at 2,000 r.p.m.)	175 h.p.
Power (at 2,200 r.p.m.)	190 h.p.
Power (at 2,400 r.p.m.)	210 h.p.
Power (at 2,600 r.p.m.)	230 h.p.
Power (at 2,800 r.p.m.)	250 h.p.
Power (at 3,000 r.p.m.)	270 h.p.
Power (at 3,200 r.p.m.)	290 h.p.
Power (at 3,400 r.p.m.)	310 h.p.
Power (at 3,600 r.p.m.)	330 h.p.
Power (at 3,800 r.p.m.)	350 h.p.
Power (at 4,000 r.p.m.)	370 h.p.
Power (at 4,200 r.p.m.)	390 h.p.
Power (at 4,400 r.p.m.)	410 h.p.
Power (at 4,600 r.p.m.)	430 h.p.
Power (at 4,800 r.p.m.)	450 h.p.
Power (at 5,000 r.p.m.)	470 h.p.
Power (at 5,200 r.p.m.)	490 h.p.
Power (at 5,400 r.p.m.)	510 h.p.
Power (at 5,600 r.p.m.)	530 h.p.
Power (at 5,800 r.p.m.)	550 h.p.
Power (at 6,000 r.p.m.)	570 h.p.
Power (at 6,200 r.p.m.)	590 h.p.
Power (at 6,400 r.p.m.)	610 h.p.
Power (at 6,600 r.p.m.)	630 h.p.
Power (at 6,800 r.p.m.)	650 h.p.
Power (at 7,000 r.p.m.)	670 h.p.
Power (at 7,200 r.p.m.)	690 h.p.
Power (at 7,400 r.p.m.)	710 h.p.
Power (at 7,600 r.p.m.)	730 h.p.
Power (at 7,800 r.p.m.)	750 h.p.
Power (at 8,000 r.p.m.)	770 h.p.
Power (at 8,200 r.p.m.)	790 h.p.
Power (at 8,400 r.p.m.)	810 h.p.
Power (at 8,600 r.p.m.)	830 h.p.
Power (at 8,800 r.p.m.)	850 h.p.
Power (at 9,000 r.p.m.)	870 h.p.
Power (at 9,200 r.p.m.)	890 h.p.
Power (at 9,400 r.p.m.)	910 h.p.
Power (at 9,600 r.p.m.)	930 h.p.
Power (at 9,800 r.p.m.)	950 h.p.
Power (at 10,000 r.p.m.)	970 h.p.

AN AMERICAN DEVELOPMENT IN LARGE BORE AIRCRAFT ENGINES

The Wright D-1 is a distinctively American engine developed for the propulsion of lighter than air machines, recently completed for the U. S. Navy Department.

This is the largest heavy

duty aircraft engine developed to date and is designed particularly for use in ships of the Zepplin type.

The D-1 marks a very high engineering point of achievement in lighter than air aeronautical propulsion.

WRIGHT

AERONAUTICAL CORPORATION

PATERSON, NEW JERSEY, U. S. A.

JULY 24, 1922

AVIATION

VOL. XIII. NO. 4

Member of the Audit Bureau of Circulations

CONTENTS

Editorials	93	Trade Notes	101
Cleveland-Detroit Airway Incorporated	94	Aircraft for U. S. Emergency	101
Washington Aero Club	95	Air Chiefs to Fly in Changes	101
Lewis Trophy Award	95	Air Tests of Thorpe's Planes	102
Annual Meeting of Aero Club of U. S.	96	Aeronautics' Expenditure	102
Mechanical Solution of Soaring Flight	106	Army and Navy Air News	107
New British Air Line	108	Cosmos Aeronautical Events	108
"Pistol" is Another Competition	109	Foreign News	109

THE GARDNER, MOFFAT COMPANY, Inc., Publishers

THOMSON, N. Y.

225 FOURTH AVENUE, NEW YORK

Subscription price: Four dollars per year. Single copies ten cents. Canada, five dollars. Foreign, six dollars a year. Copyright 1922, by The Gardner, Moffat Company, Inc.

Entered as second-class matter Nov. 21, 1910, at the Post Office at Richmond, N. Y., under act of March 3, 1879.

THOMAS-MORSE AIRCRAFT CORPORATION

CONTRACTORS TO U. S. GOVERNMENT

ITHACA,



NEW YORK



THE HONOR OF THE HOUSE

In all the world of music one piece stands alone. Years of intelligent, painstaking, devoted work have placed it in a class by itself. Music loves her it in respect of income. If economy is necessary they economize on something else.

There is one great jewelry house from whom the others take their ring. If diamond or silverware is purchased here, adjectives are useless to enhance its value.

For a generation the work of one yacht builder has challenged comparison. If you wish to be judged by the best, you do not describe it as a good yacht, a fast yacht, or a seaworthy yacht — you simply say that it is his yacht — everybody understands.

In each case the honor of the house is behind the production. Quality is unquestioned.

Those who discriminate, place Glenn L. Martin airplanes in this classification. The would-be purchaser may debate the size and power, or calculate the expense. He does not question the quality.

For a few added dollars of first cost the purchaser gets the most economical airplane obtainable — economical because of longer life, greater reliability and reduced maintenance expense.

It is a fact that no other airplane has ever owned or operated airplanes which give such unflinching service nor so high a mileage with so little attention and upkeep cost.

THE GLENN L. MARTIN COMPANY

CLEVELAND

L. D. CANNON
PRESIDENT
W. D. HOFFER
VICE-PRESIDENT
W. I. SCAMM
TREASURER
CARLOS F. WHEELER
BUSINESS MANAGER

VOL. XXII

JULY 24, 1922

LAMAR O'NEIL
EDITOR
VICTOR E. CLARK
ASSISTANT EDITOR
ROBERT H. HARRIS
CIRCULATION MANAGER

No. 4

AVIATION

America at the French Gliding Meet

AMERICAN participation in the French gliding competition which is to take place next August will come as highly gratifying news to all those who believe in that the leading position the United States has acquired these last few years in the matter of aircraft design should be preserved to all and sundry by entering the principal international aviation contests.

While financial considerations may at times render difficult the execution of this desire, there are some competitions from which American aviation should not be absent. The French gliding meet is one of these events, and it is therefore the subject of much satisfaction to know that America will be suitably represented by the gliders built by the demonstrated Engineering Society of the Massachusetts Institute of Technology.

With the scoring of points in a gliding and soaring competition depends to a large extent on the skill of the pilot, we believe that the MIT gliders which are to compete in France represent a distinct advance in the design of such aircraft. Considering that they are only the initial expression of modern American experimentation in that line of endeavor, the MIT gliders have a remarkably "finished" appearance, due so much to the fact that in their design no feature will prove in service which has been neglected.

Therefore, given a tolerable amount of luck—which plays a role by no means negligible in aviation, as in everything else—the American gliding team should give a good account of itself in the French competition. To this end the team has the best wishes of the American aeronautical community.

The Vulnerable Part of a Battleship

IS armor plate as largely the ruler of a battleship's power of resistance? Has the airplane bomb made the lighting, communication and condenser systems of fighting craft the most vulnerable parts of their equipment? These questions are receiving the most careful study by naval engineers throughout the world.

The most protective feature of the battleship, its armor plate, is no defense against the airplane bomb. This is revealed by those who are open minded and want to know the truth. The huge appropriations for steel for this purpose are no longer a few years ago the power of armor is allowed to be tested.

It is a new development in our warfare that the vulnerability of a battleship to bomb attack leaves no possible relation to its armor plate, as the armor plate does not perform any function in this respect. The armor plate only gives a short distance below the water line. Therefore, a bomb dropped in the water not far from the ship and exploding at a depth of 50, or even 100, feet, would not splinter the thin structural plate below the armor and on the bottom. This could not stand very

much external pressure, being much less in structural strength than the hull of a submarine, and we know, from experience, that a submarine can be sunk by an ordinary depth charge of three hundred pounds of T.N.E. exploding at a distance of three hundred feet. Such pressure is about 1500 pounds to the square inch. It is therefore inevitable that an airplane bomb weighing four thousand pounds, with twenty-five hundred pounds of T.N.E. would sink any battleship now built or likely to be built, if exploded within a few hundred feet of the hull.

The real points of attack of the airplane bomb are the structural plates on the bottom of a ship, and the lighting, communication and condenser systems of a battleship. These vital parts of any vessel are not able to withstand earthquake shocks such as come from the heavy explosions of ships of huge bombs timed to explode alongside a ship.

The people of the United States should call on Congress to press to them by experiments with old battleships properly strengthened that the greatest battleships and those building can withstand an attack from the air before more of the people's money is spent on vulnerable structures and, more important, before an enemy proves the truth of this fact by demonstration in time of war.

Aircraft in a Public Emergency

SHOULD anyone still doubt the public service aircraft are capable of rendering in a public emergency, such as a big tramp of the transportation industry, the present mobilization of America's air fleet, both military and civil, furnishes an emphatic demonstration to the satisfaction.

The increasing of the industry by the Aeronautical Chamber of Commerce shows that within a few days one thousand civil aircraft, capable of transporting at least 5,000,000 first class letters daily, could be placed in operation should the need arise. The cooperation of Army and Navy aircraft would further increase this number, so that little difficulty should be experienced in keeping at least the principal postal services going during the threatened tramp of mail trains.

Never before has the aircraft industry had a similar opportunity to demonstrate the existing utility of commercial aviation. Should the tramp of the mail trains become an accomplished fact, the mails could be carried at much greater speed by aircraft than the existing transcontinental air mail route on a track less from which branches would radiate over a wide territory. While an emergency service such as this cannot be expected to function with the dependability of the regular air mail service, it is believed, nevertheless, that the volunteer mail pilots would put up a sufficiently good performance where landing fields are available to impress the public with the great advantages of aerial mail carrying, and so hasten the advent of the compulsory carriage of all first class mail matter by air.

Cleveland-Detroit Airway Inaugurated

Aeromarine Airways Open their Great Lakes Division with a Daily Flying Boat Service



The Aeromarine passenger flying boat *Santa Maria* at Cleveland.

The Aeromarine Airways, Inc., on July 14 officially opened a daily flying boat service between Detroit and Cleveland with the arrival of two eleven-passenger cabin flying boats, the *Santa Maria*, and the *Wolverine*, in Cleveland after a 30 mile flight from Detroit.

On board the *Wolverine* which was piloted by E. D. Muesch, were C. F. Badden, president of the Aeromarine Airways, Inc., W. E. Hitzman, president of the Detroit Athletic Club, Commodore A. A. Schmidt, president of the D & C Steamship Co., P. J. Brock, managing editor of the Detroit Free Press, H. V. Wilson, of the Detroit News, and Roland Roloff, its first manager of the Aeromarine Airways, Inc.

On board of the *Santa Maria*, which was piloted by D. G. Richardson, were I. M. Updegrave, president of the New York Cadillac Motor Car Co., and owner and president of the Aeromarine Plane and Motor Co., the parent corporation, C. F. Hartweg, vice president of the General Motors Co., and J. W. Larkin, Commissioner of Police of Detroit. Carl

Friedrich of Detroit, Frank Lewis of New York, T. Nora, station picture photographer, C. S. Mott, general manager of the Great Lakes Co., and a representative of the United States.

The boats arrived at Cleveland at 12:20 p. m. The passengers were greeted by a committee from the Cleveland Chamber of Commerce. Glenn L. Martin, of the Great Lakes Marine Aircraft Corp., headed the welcoming delegation. B. A. Brown, sales and advertising manager of the Aeromarine Airways Co., and Walter Henschel, field representative of the company were also at the dock when the boats arrived. The visitors and welcoming committee were driven from the dock to the Cleveland Chamber of Commerce, escorted by a troop of mounted police. At the Chamber of Commerce they were met by Major Fred Kautsky, and Newton D. Baker, president of the Chamber of Commerce, gave an address of welcome and complimented Mr. Updegrave and Mr. Roloff on the initiative shown by the Aeromarine Company in developing commercial

airways in America. The party returned to the flying boats at 3 p. m. and at 3:20 p. m. the boats left the water on their return flight to Detroit.

The Cleveland office of the Aeromarine Airways is at the D & C Dock at the foot of East 92d Street. Tickets and passenger lists may be obtained at this office and at the uptown office of the D & C Co., 2810 East 92d St.

In Detroit the operating base is at the Municipal Park and the filter. The downtown passenger station is at the foot of First Street. Tickets may also be had at the D & C office. The operating equipment for this service is up-to-date in every way. Four motor boats and four floats were shipped from the Aeromarine factories at Kewport, N. J., and are stationed at the different bases. Through the co-operation of Commodore Schmidt, Aeromarine passengers have the use of the D & C whaling piers at both cities. The boat schedules are as follows:—

9:40 a. m. From Cleveland and Detroit. Returns at 5:00 p. m. from each city. The first company of *Santa Maria* and *Wolverine*, and a direct open boat, the *Vigors*. Another direct passenger flying canoe has been ordered from the factory and will join the fleet within a few days. The boat was named the *Isabell*.

In connection with this latest expansion of the air transport



Charles F. Badden, president of Aeromarine Airways, Inc.

division of Aeromarine Airways, a few personal notes on the men who were instrumental in the organized success and the swift operation of this present enterprise will be of interest.

C. F. Badden, President of Aeromarine Airways, was from 1908 to 1909, general sales manager, Chasman-Willard Press; 1910 to 1912, general native manager, Automobile Division, Buick Motor Co., of Buick Road, Inc.; 1914 organized Badden Motor Truck Co.; April 1920, started President Aeromarine Engineering and Sales Co., and Aeromarine Airways, Inc. Under his direction the Airways fleet in two years has grown from one eleven-passenger boat to seventeen. The operations have been extended from New York to Atlantic City, all over the North and West Indies, and now on the Great Lakes Division. Mr. Badden is vice-president of the Automobile Division of Chasman and it was at his suggestion and direction that the *Santa Maria* made the longest commercial flight in the history of aviation. He has been active in establishing a network of commercial aviation throughout the United States by organizing sales campaigns and carrying sales and city agents in American and foreign cities. Mr. Badden is recognized as the one man who has made a commercial air-transport company a paying proposition.

Roland Roloff, manager of operations, Great Lakes Division, was taught to fly by Victor Cushman, instructor two-

years; in charge of Buffalo Curtiss Field, one year, experimental test pilot, four years, both airplanes and seaplanes, both climbing record 20,000 feet in 50 minutes, made eight altitude flights, several about equalling world's record. American aviator Gordon Bennett Race 1920. Mr. Roloff was manager of operations during the first Winter at the Miami air base of the Aeromarine Airways, Inc.

Henry A. Brown, sales and advertising manager, Aeromarine Engineering and Sales Co., Aeromarine Airways, Inc., on both land and sea world's smallest seaplane pilot, 1920. 1921 developed emergency landing and carrying gliders and motor driven seaplanes; 1927, Aviation, Royal Flying Corps, Canada, 1929 assisted in handling patients; for Aeromarine carried companies through Massachusetts Aircraft Association; 1922, handled flying boat offer through United States, demonstrated flying boats, made first complete aerial circumnavigation of the Great Lakes.

Clyde A. Remmersma, chief test pilot, Aeromarine Plane and Motor Co. and Aeromarine Airways, Inc., in 1917, Curtiss Co. in Buffalo and the Curtiss Robinson Co., instructor in fly; 1917, student flying instructor at Muskoka; junior flying instructor, 1917-1918, Waltham Falls, Tex.; 1919, senior flying instructor, Mr. Remmersma has made many flights from New York to Cuba, was pilot of the Aeromarine flying boat which made the first delivery of mail to a base at sea and his latest exploit was to carry twenty-seven people on Aeromarine flying boat from New York, N. J., to New York a distance of thirty miles. The men on the largest machine of passengers ever carried in a commercial flying boat on the United States. Edward Mosch, ex-Marine Corps pilot, was at the wheel of the *Santa Maria* when she made the world record long distance flight last week from Key West to New York via Washington, New York, Montreal, the Great Lakes and New Orleans. D. G. Richardson, ex-Air Service pilot and after the War, chief instructor of the Cuban Air Service, received considerable active test duty when he saw one of the Aeromarine aircraft flying boats with four passengers from New York to Havana, Cuba, in 20 to 30 min. flying time.

Washington Aero Club

Recently a number of Washington, D. C. aviation enthusiasts met at the University Club and discussed plans for the formation of a permanent Washington aero club. The proposition was discussed from all sides and the angle that received the most favorable consideration was to have the club on a commercial basis at the start, which would make the way easier for further development. It was pointed out that if the club maintained two planes, one of the land type and the other a boat, they could provide trips around Washington that would save time and further expansion. Low membership dues were also thought as a factor to insure success and popularity.

It was also brought out that new clubs in various cities have sprung up over night and died in almost the same length of time. Members of the movement are anxious in their enthusiasm and Walter E. Blount declared, "We're not going to start the proposition off with a dash and a fair celebration." Col. Hammett, secretary of the Club of Aeronauts, and J. M. Larson were among the speakers.

C. A. Wright, consulting aero engineer, was appointed temporary secretary and Mr. Blount temporary chairman.

The Larsen Trophy Award

The Contest Committee of the Aero Club of America on June 30 directed C. B. Williamson, of Tulsa, Okla., to return to the Aero Club of Canada \$2,000 as prize money which it is alleged, was rightfully awarded him following the Larsen trophy airplane contest, held at Canada, last November. John M. Larsen, donor of the trophy, whose entries in the race exhibited outstanding performance, notwithstanding the officials took the award to Mr. Williamson, has presented evidence supporting his claim that a fraud was perpetrated. Upon the return of the prize money, further hearings will be held.

Aeromarine planes and seaplane committee at Cleveland, Ohio, after the arrival of the *Santa Maria* and *Wolverine* from New York. Left to right—E. D. Muesch, capt. pilot of *Wolverine*, Walter Henschel, field representative of the Aeromarine; H. A. Brown, sales and advertising manager of the Aeromarine; Glenn L. Martin, head of reception committee, Cleveland Chamber of Commerce; C. J. Zimmerman, pilot of *Wolverine*; D. G. Richardson, pilot of *Santa Maria*, mechanic; and Newton Peterson, foreman.

Annual Meeting of Aero C. of the

Membership has Almost Doubled in the Last Six Months - Varied Work of the Chamber

The annual meeting of the Aeronautical Chamber of Commerce of America, Inc., was held at the Waldorf Astor, 565 Park Avenue, New York City, July 13. The organization, which was formed the first of the year, with a charter membership of one hundred, reports an increase of nearly 100 per cent in its membership for flying meets in Chicago in August and Detroit in October were announced.

The following directors were unanimously re-elected: George C. Looming, Lansing Aeronautical Engineering Corp.; E. B. Riedel, General Electric Co.; C. C. Gurnea, Wright Aircraft Corp.; Arthur Macfarlane, Co. of America; B. E. Bachold, General Motors Corp.; E. E. Bradley, Manufacturers Aircraft Association, Inc.; Charles H. Coffey, President International Aircraft Corporation, Fairchild Aircraft Corp.; John M. Lammie, J. L. Aircraft Corp.; Lawrence Sperry, Lawrence Sperry Aircraft Corp.; Frank H. Bissell, Curtiss Aeroplane & Motor Corp.; F. B. Bentschler, Wright Aeronautical Corp. Referring to the Annual report made to the members of the Aeronautical Chamber of Commerce by the General Manager:

Membership

Our organization was formally announced Jan. 1, last, with 100 charter members. In the first six months we have increased our membership to 176, divided as follows: Class A—18, Class B—58, Class C—117. Since the last meeting of the Board of Directors, Class B and Class C memberships have been added. In addition, full and complete cooperation has been obtained with two important groups in the light-house field. Among the new members are the following:

Thomas Storage Battery Co., Philadelphia, Pa.
Baltimore Forge and Mfg. Co., Baltimore, Md.
Hamilton Arm Mfg. Co., Milwaukee, Wis.
Hawley Co., Kansas, Mo.
Hawley Co., New York, N. Y.
Standard Oil Co. (Indiana), Chicago, Ill.
Tide Water Oil Sales Corp., New York

Flying Meets

We have co-operated in holding two flying meets this spring, the first at Garden City on April 20, and the second at Baltimore on May 20. The attendance at the Garden City Meet was conservatively estimated at 20,000, the one at Baltimore, 5000.

In addition to the above, we have an agreement with the Detroit Aviation Society contemplating our assistance in the management of the meet at the Flying meet to be given in Detroit next October.

General Council

Washington: Close liaison has been maintained with official Washington. Representatives of the Chamber held a conference with President Harding at April 13, 1935, at which time the need of aerial law and an aggressive aerial policy was urged. Following this conference the President wrote a most important letter endorsing the organization and extent of his interest in the subject of aviation and our organization. "We and many Departments" our contact with the War Department has followed lines with which our members are familiar, and recently has been particularly active due to the participation of the Department in the runs of Detroit next fall.

For some time we have been concerned upon the War Department the necessity of great care in the release and sale of surplus material. In the past, sale of surplus aeronautical material have resulted in a number of false accidents, due to the failure of machines in flight. The War Department is now in a position to report that such a policy has now been adopted by the Department and that every precaution is being taken, in the

absence of an law, to prevent unwarranted material being sold to the public.

We have consistently and persistently advocated recognition on the part of the public and the Government, that we must have an aircraft industry before we can have aviation. We have made much publicity evidence of increased acceptance and appreciation of this fact.

During the month of May we completed and submitted to the War Department an extensive aeronautical industrial survey. This survey was conducted by a special committee headed by the Secretary of War, which was addressed to our members. We have received various acknowledgments from officials in the Air Service and the Office of Secretary of War, which state that the information thus gathered is greatly appreciated by the Department.

Post Office Department: On Jan. 6, Feb. 21, April 19 and 20, reports were held by the House Committee on the Post Office and Post Roads on bills introduced by Representatives Stenerson and Kelly, proposing authority for air mail contracts. At the request of the Post Office Committee, we met and a questionnaire to our members and to 100 Chambers of Commerce throughout the United States, a digest of the replies was prepared and submitted by us at the hearings. All of which has been passed on the official report and distributed to our members. Through contact with the office of the Post Office, we have advised and encouraged the plan to develop mail flying of the Air Mail.

Department of Commerce: We have prepared and submitted to the Secretary of Commerce, a summary and report of our aerial activities in the United States during the past year. This was submitted to the Secretary of Commerce on April 10, and after being studied by the Department, the report was passed by Secretary Hoover to the newspapers on June 10. This report also contained a detailed five fold plan for the development of Commerce. It has also been very generally helpful in forming the basis for a very large number of constructive editorial articles in the newspapers throughout the country.

Aerial Legislation

Our work in connection with the Unlawful Act, S. 5078, has been continuous. In addition to our conference with President Harding, we subsequently had conferences with the Secretary of Commerce, Mr. Houston, Chairman of the House Committee on Commerce and Finance, Chairman of the House Committee on Commerce, Mr. Kinn, the head of the Department of Foreign and Domestic Commerce, and Judge Leach, Solicitor of the Department of Commerce. At Judge Leach's request, we also have a clear understanding of our members at our office in New York. At this time the entire subject was discussed in detail and it was planned that following this conference, full recommendations from the Department of Commerce were to be prepared and introduced in Congress. The advancement of the bill is now delayed on account of a suggestion that has been made to give consideration at this time to the question of the ownership of aerostats or dirigibles, which is being considered by the Government in a single Department. This is regarded as very unfortunate as it will delay final consideration very greatly.

Trade Association Conference

On April 13 we participated in the National Trade Association Conference with Secretary Hoover. A representative of our office was appointed to serve with the National Aeronautics Chamber of Commerce and the Motor and Aeronautics Manufacturers Association, to prepare a foreign trade booklet, to be distributed by the Department of Commerce throughout the world. Copies of this pamphlet have been sent to our members.

On May 19 to 23, an attended meetings of the Chamber of Commerce of the United States. As members of this body, our activities fall within the Department of Transportation and Communication. The Manager of this Department, J. E. Nathan, is assisting us in establishing contact with the various national chambers of Commerce throughout the United States for the purpose of enabling us more effectively to extend our airplane work.

We are seeking increasing opportunities to extend our work and establish close contact with local commercial agencies in the various parts of the country. Due to the invitation by us in the Air Mail hearings, the Merchants Association of New York City sent a representative to attend the hearings in Washington. Following this, which coincided with a request for data from the Chief of the Air Service, the Merchants Association decided to appoint an Aeronautical Committee. We held the problem of conferring with them prior to the personal of this group. As a result, a member of our office, Mr. J. E. Nathan, has been accepted by Lewis J. Nathan, (President of the Irving National Bank) President of the Merchants Association, to act as a member of this Committee with a number of very prominent and influential business men, whom they have selected for this service.

We have maintained very close relations with the Chambers of Commerce of Boston and Philadelphia. At Philadelphia, a representative of our office addressed the representatives of the organization and obtained plans on the Aviation Committee. Some of our members who are in business in Philadelphia. In Boston, we have co-operated with the Chamber of Commerce in their successful effort to secure through the State Legislature an appropriation providing for the establishment of a flying school in that city. A letter from the organization, thanking us for our support and co-operation, expresses the conviction that our activity had a very great deal to do with the successful outcome of this movement. We participated in similar propositions with Chambers of Commerce of Baltimore, with the Aero Club of Illinois, the Chicago Association of Commerce, and other organizations in Burlington, Vt.; Brunswick, Me.; Kansas City, Mo., and the Aero Club of Boston. A representative of the Chamber addressed the Aero Club of Boston on the subject of an aerial landing field in a few weeks ago.

Except for these meetings which are frequent stated with our office, there is probably very few real-time presentations of the extent to which our members are used to a meeting place for the exchange of ideas and discussion of general aviation, affecting the art and industry. There is a constant flow of visitors, the facilities of the library are in constant and increasing demand, thousands of individual members send the industry as a whole as well as to its own conservation and advice, with the result that the organization acts as a meeting place, and at the same time, stimulating agency, with a constant tendency toward stronger thinking and harmonious cooperation throughout the industry. While this places a great tax upon the personnel of the office, making it very difficult to handle the correspondence and other details of routine, we feel that it is very essential that this work be maintained. The tangible result of this sort of contact that we are beginning to see is the fact that the organization is now getting. Without the advantages of a clearing house, such as our office affords, there would be a vast amount of misinformation released and printed. The amount of this sort of material, however, upon request, or upon or upon petition, that is arrested and directed each week, is very noticeable.

Publicity

Our activities in this field have been carried on along the lines with which members are all familiar. In some respects the work has been expanded. Our new initiative, arrangements were made for the broadcasting of aeronautical information through the great radio station on Long Island. This was possible through the courtesy of the Radio Editor of the New York Tribune, Jack Babin. Within the last few weeks we have supplied thirty magazine writers with material and photographs for sensational stories. Motion pictures of aeronau-

tical events, which we have either arranged directly or have arranged for running each week. Aeronautical photographs have been given to the news photo agencies two or three times a week, and at frequent intervals stories of current aeronautical interest are supplied to the Associated Press, the International News Service, the United Press, and all foreign news agencies with headquarters in New York.

We frequently learn, some time after the event, that various members have participated or had knowledge of important aeronautical news stories, and the opportunity has been taken of advising the facilities of the organization. It is due to failure to notify us of the event at the time, the members are particularly requested, whenever practicable, to report to this office promptly, any event in aviation, that would be of interest to the Chamber. This policy is intended to provide that such story reported will be featured, but you may be certain that, in the lack of our ability and judgment, the matter will receive prompt attention.

Year Book

The Year Book is now ready for distribution. Members are requested to order. Year Books promptly, if they have not already done so. The year's edition will be particularly valuable due to the Engine Division in the Design Section. This consists of 16 full pages of two drawings of historical and contemporary engines.

Editorial Service

Every effort is being made by the Chamber to eliminate waste motion, to establish economies and yet maintain our editorial service. The Chamber is now in a position to make, as you are familiar with. To meet a well defined, carefully planned plan, and also to provide a medium for the dissemination of data of general interest to all members. The news of aviation has been established, to be known as "Aeronautics." This bulletin, the first issue of which is June, will be published the first of each month and sent to the entire membership. This is also used for publicity purposes.

New Projects

Detroit: We have an agreement with the Detroit Aviation Society to participate in the management of the meet at the Racers at the time of the meet for the Pulitzer Trophy October of this year. A representative of our office will attend to the details of management of the meet beginning July 30 and upon that date, we will have a meeting with the Detroit Aviation Society, to discuss the details of the meet at Detroit, handle and direct all publicity.

Chicago Meet: Through the interpretation, a few weeks ago, of the Chicago Aeronautical Bureau, the situation in Chicago crystallized into a definite plan. For months there had been various discussions of flying meet and congress, but definite action was not possible until the last fortnight when a representative of the Chicago Aeronautical Bureau called on us. The plan is to hold a flying meet and convention, August 10 to 12, which we anticipate will be charged. The purpose is to develop Chicago's position in air transportation. The President of the Chamber and others, including Messrs. Conlin and Rodden, have accepted invitations to speak. The plan is to present a program to the public, and it is recommended that the Chamber section of it and others meet it in every way possible.

Aeronautical Institute: There has been under consideration the desirability of an Aeronautical Institute. It now appears that the time of the Institute will be held in Detroit. The program of the Detroit Aviation Society includes the organization of an Air Congress in connection with the effort that is being made to perfect the National Aeronautics Association. In the light of this, we are now in a position to make a decision. There is considerable advantage of opinion on this subject. Then, as a consensus, it is due to a misunderstanding of aims, scope and purposes of such a plan. Many of our members are now in the Air Service, and it is feared to be a mistake to establish an Institute, which would be a very real recommendation that the work be left entirely to the S.A.E. As a matter of fact, a program for an Aeronautical Institute would not only include papers on engineering subjects, but

Chicago Calls You

To

America's Greatest Air Meet, Aircraft Exhibition and Aeronautical Congress



Chicago calls you to the greatest air program in history of aeronautics, to be staged August 4th to August 13th, 1922, before the largest crowd ever assembled to witness any similar event.

First: Aviation contests for all types of airplanes and hydroairplanes, with liberal cash prizes and valuable trophies.

Second: Aircraft exhibition of airplanes and hydroairplanes, aeronautical material, equipment and accessories.

Third: Aeronautical Congress, with addresses by the country's foremost authorities on the various phases of aeronautics.

Grant Park, extending more than a mile along Chicago's lake front and within five minutes of the heart of Chicago's big business district, probably provides the finest facilities in the world for the holding of aeronautical events for both airplanes and hydroairplanes.

The yacht harbor of the Chicago Yacht Club, adjoining Grant Park, is an ideal landing port for hydroairplanes.

These Prominent Men Have Consented to Speak At the Aeronautical Congress.

Major General Mason M. Patrick, Chief of Air Service

Brigadier General Wm. Mitchell, Asst. Chief of Air Service (Illustrated)

Major Hiram M. Hickam, Chief of Air Service Information

Commander Charles, British Air Attache (Commercial Aviation in Great Britain)

Samuel S. Bradley, Aeronautical Chamber of Commerce of America

Glen H. Curtis, Curtiss Aeroplane Motor Co., Garden City, L. I.

Garry C. Loring, President—Aeronautical Chamber of Commerce of America

Colonel Paul Henderson, 2nd Asst. Postmaster General

Rear Admiral W. A. Moffet, Chief of Division of Aeronautics, U. S. Navy

Major General George A. Bell, Jr., Commander 6th Corps Area, U. S. A.

Captain W. Evans, Commandant Great Lakes Naval Training Station

Lieutenant Colonel Harold E. Harvey, Aero Club of America

Wm. B. Stout, Stout Engineering Laboratories, Detroit

C. S. Ransom, President, Chicago Aeronautical Bureau, Inc.

Wm. P. MacCracken, Jr., Chairman, Committee on Law of Aviation American Bar Assn.

C. G. Peterson, Asst. to the President, Wright Aeronautical Corps, Paterson, N. J.

Major Frank H. LeGarde, New York City

C. F. Hodges, Aeromarine Airways, Inc., Fox of Ice St., Detroit, Mich.

CHICAGO AERONAUTICAL BUREAU

Suite 1170 - 1172 Congress Hotel

Chicago, Illinois

Read What the LARGEST AERONAUTICAL SUPPLY HOUSE in America says
about

Lakeside Aviation Oil

J. M. JOHNSON

E. A. JOHNSON

Johnson Airplane and Supply Co. of Dayton, Ohio

"JOHNSON SERVICE"

LARGEST COMMERCIAL AVIATION
SUPPLY HOUSE IN THE COUNTRY

ADDRESS AND FLYING FIELD
WILMINGTON AND FLETCHER ROAD
PRIME FLAT 3750

5/16/32

The C. L. Maguire Petroleum Co.,
McCormick Building,
Chicago, Ill.

Gentlemen:

Please find enclosed herewith our order #152
for Lakeside Aviation Oil.

Last week we made a six hour flight in an
L.V.G. three passenger plane powered with 220-Henz
The oil consumption was ~~one quart per hour~~. This makes
the sixth type of motor in which we have tested this
oil and in every instance the consumption has been less
than half that of any other oil we have tried, and in
every instance the motors run cooler.

Our sales on Lakeside are increasing every
day, and it is a real pleasure to sell it to our custo-
mers. They are so entirely satisfied.

Trusting we may have prompt shipment of the
order enclosed, we are

Yours very truly,

JOHNSON AIRPLANE AND SUPPLY COMPANY

By *J. M. Johnson*

JMJ:HLJ
Enclosure 1.

Produced Only by

THE C. L. MAGUIRE PETROLEUM CO.

McCormick Building, Chicago, Ill.

"We Handle this Lubricant from the Ground to You"

California Distributor: -- WESTERN AIRCRAFT CORP., 1210 E. 6th St., Los Angeles.

"IT'S NOT THE COST PER GALLON—IT'S THE COST PER FLYING HOUR"